

AMENDMENTS TO THE CLAIMS

The listing of claims will replace all prior versions, and listings, of claims in the application. Please cancel claims 42-48 without prejudice. Please amend claims 3, 4, 7-11, 14, 15, 18, 19, 30, 31, 34, 37, 38, and 41 as follows.

Claim 1 (Original): A glucose uptake inhibitor in the small intestine comprising a compound or a salt thereof that inhibits the activity of a Na⁺/glucose transporter (SGLT) homolog.

Claim 2 (Original): A glucose uptake inhibitor in the small intestine comprising a compound or a salt thereof that inhibits the expression of a gene for Na⁺/glucose transporter (SGLT) homolog.

Claim 3 (Currently Amended): The inhibitor according to claim 1 ~~or 2~~, which is a postprandial hyperglycemia-improving agent.

Claim 4 (Currently Amended): The inhibitor according to claim 1 ~~through 3~~, which is an agent for the prevention/treatment of diabetes, obesity or hyperlipemia.

Claim 5 (Original): A glucose uptake promoter in the small intestine comprising a compound or a salt thereof that promotes the activity of a Na⁺/glucose transporter (SGLT) homolog.

Claim 6 (Original): A glucose uptake promoter in the small intestine comprising a compound or a salt thereof that promotes the expression of a gene for Na⁺/glucose transporter (SGLT) homolog.

Claim 7 (Currently Amended): The promoter according to claim 5 ~~or 6~~, which is a glucose absorption promoter.

Claim 8 (Currently Amended): The agent according to claim 1 ~~through~~ 7, wherein the Na⁺/glucose transporter (SGLT) homolog is a protein comprising the same or substantially the same amino acid sequence as the amino acid sequence represented by SEQ ID NO: 1, its partial peptide, or a salt thereof.

Claim 9 (Currently Amended): The agent according to claim 1 ~~through~~ 7, wherein the Na⁺/glucose transporter (SGLT) homolog is a protein comprising the same or substantially the same amino acid sequence as the amino acid sequence represented by SEQ ID NO: 3, its partial peptide, or a salt thereof.

Claim 10 (Currently Amended): The agent according to claim 1 ~~through~~ 7, wherein the Na⁺/glucose transporter (SGLT) homolog is a protein comprising the same or substantially the same amino acid sequence as the amino acid sequence represented by SEQ ID NO: 5, its partial peptide, or a salt thereof.

Claim 11 (Currently Amended): The agent according to claim 1 ~~through~~ 7, wherein the Na⁺/glucose transporter (SGLT) homolog is a protein comprising the same or substantially the same amino acid sequence as the amino acid sequence represented by SEQ ID NO: 50, its partial peptide, or a salt thereof.

Claim 12 (Original): A glucose uptake inhibitor in the small intestine comprising an antisense polynucleotide comprising the entire or part of a base sequence complementary or substantially complementary to a base sequence of a polynucleotide encoding a Na⁺/glucose transporter (SGLT) homolog.

Claim 13 (Original): The inhibitor according to claim 12, which is a postprandial hyperglycemia-improving agent.

Claim 14 (Currently Amended): The inhibitor according to claim 12 ~~or 13~~, which is an agent for the prevention/treatment of diabetes, obesity or hyperlipemia.

Claim 15 (Currently Amended): The inhibitor according to claim 12 ~~through 14~~, wherein the polynucleotide encoding the Na⁺/glucose transporter (SGLT) homolog is a polynucleotide comprising the same or substantially the same base sequence as the base sequence represented by SEQ ID NO: 2, SEQ ID NO: 4, SEQ ID NO: 6 or SEQ ID NO: 51.

Claim 16 (Original): A glucose uptake inhibitor in the small intestine comprising an antibody to a Na⁺/glucose transporter (SGLT) homolog.

Claim 17 (Original): The inhibitor according to claim 16, which is a postprandial hyperglycemia-improving agent.

Claim 18 (Currently Amended): The inhibitor according to claim 16 ~~or 17~~, which is an agent for the prevention/treatment of diabetes, obesity or hyperlipemia.

Claim 19 (Currently Amended): The inhibitor according to claim 16 ~~through 18~~, wherein the Na⁺/glucose transporter (SGLT) homolog is a protein comprising the same or substantially the same amino acid sequence as the amino acid sequence represented by SEQ ID NO: 1, SEQ ID NO: 3, SEQ ID NO: 5 or SEQ ID NO: 50, its partial peptide, or a salt thereof.

Claim 20 (Original): A diagnostic agent for postprandial hyperglycemia comprising an antibody to a Na⁺/glucose transporter (SGLT) homolog.

Claim 21 (Original): A diagnostic agent for postprandial hyperglycemia comprising a polynucleotide encoding a Na⁺/glucose transporter (SGLT) homolog.

Claim 22 (Original): A method of screening a compound or its salt that regulates the glucose uptake activity of a Na⁺/glucose transporter (SGLT) homolog in the small intestine, which comprises using the homolog.

Claim 23 (Original): The screening method according to claim 22, wherein the Na⁺/glucose transporter (SGLT) homolog is a protein comprising the same or substantially the same amino acid sequence as the amino acid sequence represented by SEQ ID NO: 1, SEQ ID NO: 3, SEQ ID NO: 5 or SEQ ID NO: 50, its partial peptide, or a salt thereof.

Claim 24 (Original): A kit for screening a compound or its salt that regulates the glucose uptake activity of a Na⁺/glucose transporter (SGLT) homolog in the small intestine, comprising the homolog.

Claim 25 (Original): A method of screening a compound or its salt that regulates the glucose uptake activity of a Na⁺/glucose transporter (SGLT) homolog in the small intestine, which comprises using a polynucleotide encoding the homolog.

Claim 26 (Original): The screening method according to claim 25, wherein the polynucleotide encoding the Na⁺/glucose transporter (SGLT) homolog is a polynucleotide comprising the same or substantially the same base sequence as the base sequence represented by SEQ ID NO: 2, SEQ ID NO: 4, SEQ ID NO: 6 or SEQ ID NO: 51.

Claim 27 (Original): A kit for screening comprising a compound or its salt that regulates the glucose uptake activity of a Na⁺/glucose transporter (SGLT) homolog in the small intestine, which comprises using a polynucleotide encoding the homolog.

Claim 28 (Original): A method of inhibiting glucose uptake in the small intestine, which comprises inhibiting the activity of a Na⁺/glucose transporter (SGLT) homolog.

Claim 29 (Original): A method of inhibiting glucose uptake in the small intestine, which comprises inhibiting the expression of a gene for Na⁺/glucose transporter (SGLT) homolog.

Claim 30 (Currently Amended): The method according to claim 28 ~~or~~ 29, which is a method of improving postprandial hyperglycemia.

Claim 31 (Currently Amended): The method according to claim 28 ~~through~~ 30, which is a method for the prevention/treatment of diabetes, obesity or hyperlipemia.

Claim 32 (Original): A method of promoting glucose uptake in the small intestine, which comprises promoting the activity of a Na⁺/glucose transporter (SGLT) homolog.

Claim 33 (Original): A method of promoting glucose uptake in the small intestine, which comprises promoting the expression of a gene for Na⁺/glucose transporter (SGLT) homolog.

Claim 34 (Currently Amended): The method according to claim 32 ~~or~~ 33, which is a method of promoting glucose absorption.

Claim 35 (Original): A method of inhibiting glucose uptake in the small intestine, which comprises administering to a mammal an effective dose of a compound or its salt that inhibits the activity of a Na⁺/glucose transporter (SGLT) homolog.

Claim 36 (Original): A method of inhibiting glucose uptake in the small intestine, which comprises administering to a mammal an effective dose of a compound or its salt that inhibits the expression of a gene for Na⁺/glucose transporter (SGLT) homolog.

Claim 37 (Currently Amended): The method according to claim 35 ~~or~~ 36, which is a method of improving postprandial hyperglycemia.

Claim 38 (Currently Amended): The method according to claim 35 ~~through 37~~, which is a method for the prevention/treatment of diabetes, obesity or hyperlipemia.

Claim 39 (Original): A method of promoting glucose uptake in the small intestine, which comprises administering to a mammal an effective dose of a compound or its salt that promotes the activity of a Na⁺/glucose transporter (SGLT) homolog.

Claim 40 (Original): A method of promoting glucose uptake in the small intestine, which comprises administering to a mammal an effective dose of a compound or its salt that promotes the expression of a gene for Na⁺/glucose transporter (SGLT) homolog.

Claim 41 (Currently Amended): The method according to claim 39 ~~or 40~~, which is a method of promoting glucose absorption.

Claims 42-48 (Cancelled).